

Product Specification - TriAx® TX140 Geogrid

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General

- 1. The geogrid is manufactured from a punched polypropylene sheet, which is then oriented in three substantially equilateral directions so that the resulting ribs shall have a high degree of molecular orientation, which continues at least in part through the mass of the integral node.
- 2. The properties contributing to the performance of a mechanically stabilized layer include the following:



Index Properties	Longitudinal	Diagonal	Transverse	General
Rib pitch ⁽²⁾ , mm (in)	40 (1.60)	40 (1.60)	_	
 Mid-rib depth⁽²⁾, mm (in) 	_	1.2 (0.05)	1.2 (0.05)	
 Mid-rib width⁽²⁾, mm (in) 	_	1.1 (0.04)	1.1 (0.04)	
Rib shape				rectangular
Aperture shape				triangular
Structural Integrity				
 Junction efficiency⁽³⁾, % 				93
 Aperture stability⁽⁴⁾, kg-cm/deg @ 5.0kg-cm ⁽²⁾ 				3.0
 Radial stiffness at low strain⁽⁵⁾, kN/m @ 0.5% strain 				225
(lb/ft @ 0.5% strain)				(15,430)
Durability				
Resistance to chemical degradation ⁽⁶⁾				100%
 Resistance to ultra-violet light and weathering⁽⁷⁾ 				100%

Dimensions and Delivery

The TX geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) and/or 4.0 meters (13.1feet) in width and 75 meters (246 feet) in length.

Notes

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Load transfer capability determined in accordance with GRI-GG2-87 and GRI-GG1-87 and expressed as a percentage of ultimate tensile strength.
- 4. In-plane torsional rigidity measured by applying a moment to the central junction of a 225mm x 225mm specimen restrained at its perimeter in accordance with U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity, (Kinney, T.C. Aperture stability Modulus ref 3, 3, 1, 2000)
- 5. Radial stiffness is determined from tensile stiffness measured in any in-plane axis from testing in accordance with ASTM D6637-01.
- 6. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- 7. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.

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